



State of Louisiana

Department of Health and Hospitals

Request for Information:

Office of the Secretary

Bureau of Policy, Research and Program
Development

Louisiana Healthcare Consumers' Right to Know
Website Design

and

Louisiana Healthcare Consumers' Right to Know

Statistical Analysis

July 30, 2009

Section I. General Information

A. Background

The mission of the Department of Health and Hospitals is to protect and promote health and to ensure access to medical, preventive, and rehabilitative services for all citizens of the State of Louisiana. The Department of Health and Hospitals is dedicated to fulfilling its mission through direct provision of quality services, the development and stimulation of services of others, and the utilization of available resources in the most effective manner.

The Consumers’ Right to Know Act (Act No. 537), created by Senate Bill 287 of the 2008 Regular Legislative Session, authorizes Louisiana Department of Health and Hospitals (DHH) to collect and publish a broad range of healthcare information to give healthcare consumers expanded, web-based access to reliable information on the cost, quality and performance of their healthcare providers and health plans. The bill was proposed by Governor Bobby Jindal and State Sen. Willie Mount, chair of the Senate Health and Welfare Committee.

B. Project Overview

1. Under the Act, DHH will create a website that publishes key performance data, including, at a minimum, death rates, readmission rates, complication rates for procedures, average cost for procedures and the number of procedures a given provider has performed, and nationally accepted quality and performance measures for health providers and plans. This information will allow consumers to compare providers across a range of performance categories and make their healthcare buying decisions armed with objective information.
2. This information, through the use of statistical analysis, can be used for the development of meaningful, nationally-endorsed performance measures that assess the quality, outcomes, and healthcare costs associated with healthcare in the state of Louisiana.

C. Purpose of RFI

1. This Request for Information (RFI) is issued by the Department of Health and Hospitals, Office of the Secretary, Bureau of Policy Research and Program Development for the purpose of gathering information and costs from qualified companies which can show a demonstrated capacity to provide website design and development and/or statistical analysis of data.
2. The Department welcomes all responses to this RFI which will be utilized to learn of potential interest and the estimated cost of contracting for these services. Contractors may choose to respond to either or both parts of this RFI. The responses will be used to formulate a Request for Proposal (RFP) for combined services (website and analysis) or each task separately.

D. RFI Coordinator

Written questions and RFI responses must be directed to the RFI coordinator listed below:

Lucas Tramontozzi
Department of Health and Hospitals
Office of the Secretary
628 North 4th Street
Baton Rouge, LA 70802
Phone: 225 342-5126
Fax: 225 342-0080
Email: Lucas.Tramontozzi@la.gov

E. Schedule of Events

(DHH reserves the right to deviate from this Schedule of Events)

<i>Activity</i>	<i>Tentative Schedule</i>
Public notice of RFI	July 31, 2009
Deadline for receipt of written questions	4pm CDT August 7, 2009
Response to written questions published	August 14, 2009
Deadline for receipt of RFI	4pm CDT August 28, 2009

- F. The Department will not pay for the preparation of any information or response submitted in reference to this RFI. Nor will the Department pay for any use of response information. This Request for Information (RFI) is for planning purposes only and should not be construed as a Request for Proposal (RFP). Issuance of this RFI does not constitute a commitment by DHH to award a contract or contracts.
- G. **Proprietary Information** - Only information which is in the nature of legitimate trade secrets may be deemed proprietary or confidential. Any material identified as such must be clearly marked.

Section II. Requirements and Response

A. Website Requirements

Contractor will provide full service (not including hosting) website architecture, design, development, and content management system for two (2) distinct types of websites: a public site and a secure, private portal.

1. Two websites will be developed to support this initiative:
 - 1.1. The public website will display the Consumers' Right to Know data through the content management system developed by the contractor. Likely data that will be displayed, at a minimum, and including state and national comparators where applicable:
 - ▶ Healthcare providers
 - ▶ Provider specific healthcare cost
 - ▶ Provider specific healthcare quality
 - ▶ Provider specific healthcare outcome data on healthcare
 - ▶ Provider specific healthcare facilities
 - ▶ Global patterns and trends in the availability, use, and charges for healthcare services and the associated health circumstances
 - ▶ Health plans
 - ▶ Pharmacy and laboratory testing related costs
 - ▶ National certifications and awards for providers and plans.
 - 1.2. A secure website will be for entities, such as hospital administrators, physicians, health plan executives, etc. to be able to log-in to the website to view their data, resubmit data, and approve data before it is displayed on the public side. (DHH is expecting approximately 300 users initially, but this number is expected to grow to approximately 2,000 within the next 2 years.)
2. The solution should closely follow the DHH high-level Information Strategy depicted in Attachment VII: Information Strategy and the process flow depicted in Attachment VIII: Proposed Process Flow.
3. Website design and development must follow DHH's standards (Attachment IV: Web Application Development Standards Outline).
4. Both websites must use Microsoft Office SharePoint Server (MOSS) 2007 as a portal.
5. Only companies with experience in designing and developing SharePoint sites, in particular MOSS 2007 for Internet Sites, should respond to the Website Development portion of this RFI.
6. Database
 - 6.1. The web application will use Microsoft SQL Server 2005 (or higher) databases.

B. Website Response Format:

1. Provide links to similar MOSS 2007 for Internet Sites and SharePoint sites the contractor has developed.
2. Provide references of similar work completed for designing and developing SharePoint sites and MOSS 2007 for Internet Sites.
3. Describe how the contractor will design, develop, test and implement the solution.
4. Describe how the contractor will gather requirements during the design phase.
5. Describe how the contractor, in the development environment, will configure the websites based on the requirements gathered in the design phases.
6. Describe how the contractor will use MOSS 2007 for Internet Sites to present the (public) application.

7. Describe how the contractor will use MOSS 2007 to present the (private) application.
8. Describe how the contractor will provide a HIPAA-compliant private website which will be accessible by hospitals by logging in.
9. Database
 - 9.1. Describe how the contractor will use Microsoft SQL Server 2005 or higher as the database management system.
 - 9.2. Describe the process and software that will be used to extract, transform, and load data from disparate sources.
 - 9.3. Describe how the contractor will migrate changes using the development, quality assurance (QA)/stage, and production environments following the DHH IT procedures. (Attachment V: Application Database Object Change Procedures; Attachment VI: Application Database Object Change Process Overview)
 - 9.4. Describe the process the contractor will use to back-out/rollback changes as appropriate.
10. Describe all security that will be used for each website (such as SSL certificates, anti-virus software, etc.)
11. Describe how the application will use ArcGIS software to display selected provider locations.
 - 11.1. Describe types of rating information that will be displayed when the user hovers over a site on the map.
12. Describe how the contractor will provide medical and health information and tools regarding health and healthcare, including a symptom checklist, pharmacy information, and a place to store personal medical information that may be currently available on the internet (such as WebMD, Mayo Clinic, etc.)
13. Describe how the application will incorporate mobile technology for the public website.
14. Describe how the application will have the ability to create graphs, drilldowns, and charts to be displayed on the public and private websites. Indicate what tools will be used to complete this.
15. Describe how the public website will enable consumers to rate each facility, physician, etc. such as a 5 star rating system and the ability to post a comment. (However, DHH does not want to allow the consumer to post comments at this time, but would like the functionality available to be turned on at a later time.)
16. Describe the process and software that will be used for receiving data from statistical analysis contractor.
17. Describe how the data/content will be updated. Include how the data/content will be updated once the application has been turned over to DHH IT.
18. Describe the process that will be used to update data quarterly.
19. Describe how knowledge will be transferred to DHH for maintenance, hosting, and administration.
20. Describe how the application will be transferred to DHH for maintenance, hosting and administration.
21. Describe how the contractor will perform Administrative Training including information such as the cost of training, number limit of participants, and where the training can take place.
22. Describe how the contractor will provide training documentation for the Administrative Training
23. Describe the incorporation of online help for Administrative users for both sites, public users for the public site, and provider users for the secure site.
24. Provide information on hardware and software requirements including licenses and quantities. Include information on providing redundancy.

C. Statistical Analysis Requirements

1. The Statistical Analysis contractor will be responsible for the analysis of all applicable data, preparing content for website, and gathering or providing data that might not be available through the DHH infrastructure. This could include obtaining federal data and other pre-existing data sets including contractor's own proprietary data. The contractor should be able to, at minimum but not limited to, provide risk

adjusted mortality, readmission, utilization, and cost rates; normalized state and national averages; and display statistically significant deviations and trends.

2. The contractor will be required to integrate, through Microsoft Biztalk, a variety of disparate databases that reside in a variety of systems housed at different locations. The contractor must be versed in the integration of data such as internal Oracle databases, databases on legacy systems, mainframe environments, flat file data, and many other sources where Consumers' Right To Know data may reside. Only experienced statistical analysis companies should respond to the Statistical Analysis portion of this RFI.
3. Contractor is required to use SAS for statistical analysis.
4. Only companies with SAS experience should respond to the Statistical Analysis portion of this RFI.
5. The statistical analysis contractor will be required to possess the appropriate SAS licenses.
6. Application must be enabled to receive data from any DHH source, publicly available data sources, and other state or national comparative measures.

D. Statistical Analysis Response Format:

1. Provide references of similar work completed in which SAS was used for statistical analysis.
2. Describe how the contractor will use SAS to implement the solution.
 - 2.1. Describe SAS tools or components that will be utilized.
3. Provide prior experience in the integration of disparate data sources using legacy systems.
4. Provide experience using Microsoft Biztalk.
5. Describe how the contractor will gather requirements during the design phase.
6. Describe how the contractor, in the development environment, will configure the application based on the requirements gathered in the design phase.
7. Describe how the contractor will write white papers, compress information, and simplify the results so that the information can be displayed to the public.
8. Describe how the contractor will display the process used to arrive at each result.
9. Describe the data the contractor will obtain which will display quality and cost information on healthcare facilities for the state of Louisiana.
10. Describe data that the contractor will acquire from other state and national comparisons.
11. Describe how the contractor will process the data using SAS and then import the data into a SQL Server 2005 or higher database.
 - 11.1. Describe the process and software that will be used to extract, transform, and load data.
 - 11.2. Describe how the contractor will import data into SQL Server 2005 or higher and send the processed data to DHH for cataloging/archiving.
12. Describe how the contractor will provide Analytical Training to DHH. Include information such as the cost of training, number limit of participants, and where the training can take place.
13. Describe how the contractor will provide training documentation for the Analytical Training session(s)
14. Provide information on hardware and software requirements including licenses and quantities. Include information on providing redundancy.

Section III. Attachments

Attachment I: Total Cost Summary Schedule
Attachment II: List of Required Hardware
Attachment III: Act 537
Attachment IV: Web Application Development Standards Outline
Attachment V: Application Database Object Change Procedures
Attachment VI: Application Database Object Change Process Overview
Attachment VII: Information Strategy
Attachment VIII: Proposed Process Flow



State of Louisiana
Department of Health and Hospitals

Attachment I
Total Cost Summary Schedule

Estimated cost must be provided based on the solution then divided into fiscal years. Below is a template which must be used to provide total cost per line item per fiscal year (July 1 through June 30 of each year of the contract). Documentation must be provided in a spreadsheet format to indicate how the responder determined this cost.

Table 1: Estimated Project Cost for Website Development Services

Cost Category	FY 10	FY 11	FY 12	Total
Requirements Gathering				
Development				
Implementation				
Training				
Total by Fiscal Year:				

A breakdown of how each cost component was determined should be included. If any third party software is to be utilized, also include the following information in the cost breakdown section:

- Identify requirements for licensing and use of any third-party software such as transaction monitors, web servers, compilers, or security systems.
- Identify any associated costs with such third-party software suggested or necessary to the implementation and use of the end product

Table 2: Estimated Project Cost for Statistical Analysis Services

Cost Category	FY 10	FY 11	FY 12	Total
Statistical Analysis				
Analytical Training				
Total by Fiscal Year:				

A breakdown of how each cost component was determined should be included. If any third party software is to be utilized, also include the following information in the cost breakdown section:

- Identify requirements for licensing and use of any third-party software such as transaction monitors, web servers, compilers, or security systems.
- Identify any associated costs with such third-party software suggested or necessary to the implementation and use of the end product



State of Louisiana

Department of Health and Hospitals

Attachment II List of Required Hardware

Attachment II
List of Required Hardware

RFI must contain a list of hardware required by the solution. Responders should utilize the table below to indicate type of hardware needed as well as the quantity. Responders should include brand and model recommendations.

Type of Hardware	Quantity	Brand	Model

Regular Session, 2008

ACT No. 537

ENROLLED

SENATE BILL NO. 287

BY SENATORS MOUNT, ALARIO, BROOME, CASSIDY, CHEEK, DONAHUE, ERDEY, N. GAUTREAUX, GRAY, JACKSON, LAFLEUR, MICHOT, NEVERS, SMITH AND THOMPSON AND REPRESENTATIVES ARNOLD, BOBBY BADON, BARROW, BURFORD, HENRY BURNS, CARMODY, CORTEZ, DOERGE, DOWNS, ELLINGTON, ELBERT GUILLORY, GUINN, HARRISON, HAZEL, HENRY, HINES, HONEY, GIROD JACKSON, MICHAEL JACKSON, KATZ, LEGER, LIGI, LOPINTO, MCVEA, MILLS, NOWLIN, PEARSON, POPE, RICHARDSON, RICHMOND, RITCHIE, SIMON, JANE SMITH, PATRICIA SMITH, ST. GERMAIN, TALBOT, TRAHAN, WILLIAMS AND WILLMOTT

1 AN ACT

2 To amend and reenact Part L of Chapter 5 of Title 40 of the Louisiana Revised Statutes of
3 1950, to be comprised of R.S. 40:1300.111 through 1300.114, relative to health care
4 data reporting; to provide for Louisiana health care consumers' right to know; to
5 provide for the collection and publication of provider specific health care quality and
6 outcome data by the Department of Health and Hospitals; to provide for the
7 membership of the Health Data Panel; to provide for penalties; and to provide for
8 related matters.

9 Be it enacted by the Legislature of Louisiana:

10 Section 1. Part L of Chapter 5 of Title 40 of the Louisiana Revised Statutes of 1950,
11 to be comprised of R.S. 40:1300.111 through 1300.114, is hereby amended and reenacted
12 to read as follows:

13 PART L. ~~HEALTH CARE DATA REPORTING~~ LOUISIANA HEALTH
14 CARE CONSUMERS' RIGHT TO KNOW

15 §1300.111. Findings

16 The legislature finds that as a result of rising health care costs, the shortage
17 of health professionals and health care services in many areas of the state, and the
18 concerns expressed by consumers, health care providers, ~~consumers~~, third-party
19 payers, and others involved with ~~planning for the provision and the coverage of~~
20 ~~health care~~ making informed decisions regarding health care services, treatment,
21 and coverage, there is an ~~urgent~~ a need to have access to provider specific health

1 care cost, quality, and outcome data on health care facilities, health care
2 providers, and health plans as well as continued access to global understand
3 patterns and trends in the availability, use, and charges for ~~these~~ health care services
4 and the associated health circumstances.

5 §1300.112. Data collection; powers and duties of the ~~office of public health~~

6 Department of Health and Hospitals

7 A. ~~The office of public health,~~ Department of Health and Hospitals, in
8 consultation with the Health Data Panel, shall:

9 (1) ~~Define~~ Identify and define the ~~core~~ health care cost, quality, and
10 performance data elements to be reported to the ~~office of public health~~ Department
11 of Health and Hospitals in accordance with existing national and international data
12 standards ~~for core health data elements~~ for consumers' meaningful comparison of
13 costs for specific health care services and specific quality of care measures
14 between and among medical facilities, health care providers, and health plans.

15 (2) Develop standards of accuracy, quality, timeliness, economy, and
16 efficiency for the provision of data.

17 (3) Identify the most practical methods to collect, transmit, and share
18 required health care data as described in this Part.

19 (4) Utilize, wherever practical, existing administrative data bases, and
20 modalities of data collection to provide the required data.

21 (5) Ensure confidentiality of patients by enforcing appropriate rules and
22 regulations at least as stringent as those regulations applicable to covered entities
23 promulgated under the Health Insurance Portability and Accountability Act privacy
24 regulations, 42 CFR Part 164.

25 (6) Coordinate with the Louisiana Department of Insurance on all
26 matters of health plan cost, quality, and performance data to be collected from
27 health plans licensed to offer health insurance coverage in Louisiana. Such data
28 shall exclude premium data and information related to the development of
29 premiums.

30 (7) Include appropriate risk-adjustment measures into the production

1 of all health care cost, quality, and performance data issued to account for
2 variation in facility size, location, and patient acuity levels.

3 ~~(8) Provide, through rules and regulations promulgated in accordance with~~
4 ~~the Administrative Procedure Act, the process for the release~~ Internet publication
5 ~~of a defined data set,~~ provider and health plan specific cost, quality, and
6 performance data ~~within the limitations imposed by this Part, collected pursuant~~
7 ~~to this Part for~~ access and ~~use by a~~ consumer or ~~requesting entity. , including but~~
8 ~~not limited to a government agency, academic research organization, or private~~
9 ~~sector organization. Data released pursuant to this Paragraph shall not include:~~

10 ~~(a)~~ (9) Any Ensure that data released pursuant to this Part shall not
11 include any ~~identifier which is listed in 45 CFR 164.514(b) as being necessary to be~~
12 ~~removed in order for the data to be de-identified within the meaning of 45 CFR~~
13 ~~164.514(a).~~

14 ~~(b)~~ (10) Any other information which, if disclosed, could be detrimental to
15 ~~the discloser's ability to compete, including but not limited to payor name, insured~~
16 ~~or self-insured group name, and information that can be used to determine market~~
17 ~~share, including patient origin or referral or admission sources and patterns~~
18 Promulgate rules and regulations, in accordance with the Administrative
19 Procedure Act, to carry out the provisions of this Part.

20 ~~(c) Any data specific to the operations of licensed health care facilities and~~
21 ~~health organizations licensed by the state, including but not limited to hospitals,~~
22 ~~outpatient clinical facilities, insurers, health maintenance organizations, and third-~~
23 ~~party administrators.~~

24 ~~(7) Not restrict the use or disclosure of medical care facility identifiers~~
25 ~~contained within data released pursuant to Paragraph (6) of this Subsection.~~

26 ~~(8) In conjunction with the preparation by the office of public health for~~
27 ~~release of data according to Paragraph (A)(6) of this Section, coordinate with the~~
28 ~~Department of Insurance the release, for use by a requesting entity, of information~~
29 ~~currently required to be reported to the Department of Insurance by all health~~
30 ~~insurers, health maintenance organizations, and third-party administrators. The~~

1 ~~Department of Insurance shall make such information available upon consultation~~
2 ~~with the Health Data Panel regarding information relevant to healthcare decision~~
3 ~~making by consumers and after promulgation of rules.~~

4 ~~B. The office of public health shall create the Health Data Panel. The purpose~~
5 ~~of the Health Data Panel shall be to make recommendations to the office of public~~
6 ~~health that facilitate the release of data, pursuant to the provisions of this Part, for~~
7 ~~consumers' meaningful comparison of costs for specific health care services and~~
8 ~~specific quality of care measures between and among medical facilities. The panel~~
9 ~~shall consist of one representative from each of the following entities:~~

10 ~~(1) Louisiana Hospital Association.~~

11 ~~(2) Metropolitan Hospital Council of New Orleans.~~

12 ~~(3) Rural Hospital Coalition.~~

13 ~~(4) Louisiana Association of Focused Care Facilities.~~

14 ~~(5) Voluntary Hospitals of America, Gulf States office.~~

15 ~~(6) Louisiana State Medical Society.~~

16 ~~(7) Community Hospital Coalition.~~

17 ~~(8) AARP.~~

18 ~~(9) Louisiana Business Group on Health.~~

19 ~~(10) Louisiana Association of Business and Industry.~~

20 ~~(11) National Federation of Independent Business.~~

21 ~~(12) Louisiana Health Information Management Association.~~

22 ~~(13) Louisiana Association of Health Plans.~~

23 ~~(14) Louisiana Health Care Review, Inc.~~

24 ~~(15) Louisiana State University hospitals.~~

25 ~~(16) Tulane University School of Public Health and Tropical Medicine.~~

26 ~~(17) Louisiana Department of Insurance.~~

27 ~~(18) Louisiana Ambulatory Surgery Association.~~

28 ~~(19) Louisiana Association of Self Insured Employers.~~

29 ~~(20) Louisiana Workers' Compensation Corporation.~~

30 ~~(21) Louisiana Insurers Conference.~~

1 ~~(22) AFL-CIO.~~

2 ~~C. The office of public health may contract with private entities for the~~
3 ~~collection of data subject to the provisions of this Part.~~

4 ~~D.(1) All state agencies, including health professional licensing, certification,~~
5 ~~or registration boards and commissions, which collect, maintain, or distribute health~~
6 ~~data, shall make available to the office of public health such data as are necessary for~~
7 ~~the office to carry out its responsibilities as defined in Subsection A of this Section.~~

8 ~~(2) All medical care facilities licensed by the state, including but not limited~~
9 ~~to hospitals, outpatient surgical facilities, and outpatient clinical facilities shall~~
10 ~~submit information in the manner and form prescribed in rules and regulations~~
11 ~~promulgated by the Department of Health and Hospitals pursuant to this Part.~~

12 ~~(3) The office of public health shall take actions necessary to avoid the~~
13 ~~duplication of effort of agencies and medical care facilities required to submit~~
14 ~~information. To this end:~~

15 ~~(a) If a state agency submits the information required in Paragraph (1) of this~~
16 ~~Subsection to another state agency or organization in a manner, form, and content~~
17 ~~acceptable to the office of public health, the assistant secretary may obtain such~~
18 ~~information from the state agency or organization which receives the data and may~~
19 ~~provide that the state agency which originally provides the information is not~~
20 ~~required to submit the information to the office of public health.~~

21 ~~(b) If the information required in Paragraph (2) of this Subsection is already~~
22 ~~submitted to another state agency in the prescribed format, the office of public health~~
23 ~~shall obtain information from the other state agency.~~

24 ~~(4) Nothing in this Part shall be construed to mean that any medical facilities,~~
25 ~~health insurers, health maintenance organizations, or third-party administrators are~~
26 ~~required to submit any information beyond that required on June 1, 2007.~~

27 ~~E. The office of public health shall promulgate and enforce such rules and~~
28 ~~regulations as may be necessary to carry out the provisions of this Part, including the~~
29 ~~manner in which data are collected, maintained, compiled, and disseminated, and~~
30 ~~including such rules as may be necessary to promote and protect the confidentiality~~

1 of patients under this Part. Collected data which identifies or could be used to
2 identify any individual patient shall not be subject to discovery in civil or criminal
3 proceedings.

4 F.(1) The office of public health, as the state center for health statistics, shall
5 compile and disseminate health care data collected pursuant to this Part.

6 (2) The office of public health shall include a special report to the legislature
7 as part of the health report card submitted to the legislature prior to the 2008 Regular
8 Session in accordance with Part XLVII of this Chapter. This special report shall
9 summarize the status of the implementation of this Part and funding requirements for
10 continued implementation and operation of the state health care data clearinghouse.
11 In subsequent years, data collected pursuant to this Part shall be incorporated into the
12 health report card.

13 (3) The office of public health, as the state center for health statistics, shall
14 provide assistance to the House and Senate Committees on Health and Welfare in the
15 development of information necessary in the examination of health care issues.

16 **(11) Implement the initial phase of the Internet website created pursuant**
17 **to this Part on or before April 30, 2009.**

18 G. **(12)** In the event that sufficient funds are not appropriated to operate the
19 state health care data clearinghouse **implement this Part,** to include the collection,
20 storage, analysis, and dissemination of data to participating agencies, organizations,
21 and the general public, the application and enforcement of this Part shall be
22 suspended pending the appropriation of sufficient funds, and all accumulated health
23 care data shall be stored with appropriate confidentiality safeguards, destroyed, or
24 transferred to another appropriate agency or organization in accordance with state
25 law.

26 **§1300.113. Health Data Panel; advisory council to the secretary of the**
27 **Department of Health and Hospitals**

28 A. **The Department of Health and Hospitals shall create the Health Data**
29 **Panel. The purpose of the Health Data Panel shall be to make recommendations**
30 **to the secretary of the Department of Health and Hospitals for the**

1 implementation of the requirements of this Part. The Health Data Panel shall
2 consider the provisions set forth in R.S. 40:1300.112.

3 B. Members of the Health Data Panel shall be appointed by the secretary
4 and shall represent all interests involved in the collection and publication of
5 provider and health plan specific cost, quality, and performance data elements.
6 Members shall include but not be limited to health care purchasers, hospitals
7 and other service providers, consumer and patient advocacy groups, quality
8 improvement and health information technology groups, physicians, and any
9 other individuals or groups as deemed necessary by the secretary.

10 C. The secretary or his designee shall serve as the chairman of the
11 meetings of the Health Data Panel. The secretary may use the recommendations
12 of the Health Data Panel to fulfill the Department of Health and Hospitals'
13 responsibilities as set forth in this Part.

14 D. Members of the Health Data Panel shall serve without compensation.
15 ~~§1300.113.~~ §1300.114. Violations; penalties

16 A. All state agencies and health professional licensing, certification, or
17 registration boards and commissions, which collect, maintain, or distribute
18 health data, shall provide to the Department of Health and Hospitals such data
19 as are necessary for the department to carry out its responsibilities as defined
20 in this Part.

21 B. All health care providers licensed by the state, including but not
22 limited to hospitals, outpatient surgical facilities, and outpatient clinical
23 facilities shall submit information in the manner and form prescribed in rules
24 and regulations promulgated by the Department of Health and Hospitals
25 pursuant to this Part.

26 C. Any person, firm, corporation, organization, or institution that violates
27 any of the provisions of this Part or any rules and regulations promulgated
28 thereunder regarding **patient** confidentiality of information shall be guilty of a
29 misdemeanor and upon conviction thereof shall be punished by a fine of not less than
30 five hundred dollars nor more than one thousand dollars or by imprisonment not

exceeding one month, or both. Each day of the violation shall constitute a separate offense.

~~B. D.~~ Any person, firm, corporation, organization, or institution knowingly violating any of the provisions of this Part or any rules and regulations promulgated thereunder shall be guilty of a misdemeanor and upon a plea of guilty, a plea of nolo contendere or conviction, shall be punished by a fine of not more than one thousand dollars.

~~E.~~ E. Renewal of state licenses issued by the Department of Health and Hospitals, Department of Insurance or health professional licensing, certification, or registration boards and commissions shall be predicated in part on compliance with data reporting requirements of this Part and rules and regulations promulgated thereunder. Prior to relicensing, the ~~assistant~~ secretary of the ~~office of public health~~ Department of Health and Hospitals shall confirm compliance with data reporting requirements in writing to the appropriate permitting or licensing authority. The permit, certification, or license of any health care provider, health plan, or facility covered by this Part shall be suspended until such time as the required data is submitted to the Department of Health and Hospitals.

Section 2. This Act shall become effective upon signature by the governor or, if not signed by the governor, upon expiration of the time for bills to become law without signature by the governor, as provided by Article III, Section 18 of the Constitution of Louisiana. If vetoed by the governor and subsequently approved by the legislature, this Act shall become effective on the day following such approval.

PRESIDENT OF THE SENATE

SPEAKER OF THE HOUSE OF REPRESENTATIVES

GOVERNOR OF THE STATE OF LOUISIANA

APPROVED: _____

DHH IT-ADSS (Application Development, Services & Support)

Web Application Development Technology Standards Outline

December 2008

NOTE: Web standards for the Louisiana Department of Health and Hospitals' (DHH) Web sites are based upon industry best practices, mandates (state and federal), state OIT (Office of Information Technology) standards, or Departmental standards. These standards have been developed and adopted by the Information Technology (IT) Application Development, Services & Support (ADSS) section and there is an *expectation* that Web Application Developers, Web Page Creators, Web Coordinators, Contract Monitors, and Contractors (housed onsite or offsite) will follow them as they are adopted and posted.

For all Web products (Web applications, Web pages, Web sites, Web documents, or other Web services) developed by ADSS personnel, or as a result of a contract with DHH, the following Web standards must be followed. This includes postings that will occur to any DHH Web site or any other Web site without regard to the entity that may be posting the content.

1. Development Technology , Programming Language, and Database

- 1.1. Microsoft Visual Studio 2008
- 1.2. Microsoft Visual Studio 2005
- 1.3. Microsoft ASP.NET 3.0
- 1.4. Microsoft Visual Basic 2008 (VB 9.0)
- 1.5. Microsoft Visual Basic 2005 (VB 8.0)
- 1.6. AJAX
- 1.7. Microsoft SQL Server 2005
 - 1.7.1. Reporting Services
- 1.8. Microsoft IIS 6.0 Web server software
- 1.9. Third party components?

2. Architecture

- 2.1. Design characteristics
 - 2.1.1. Scalability
 - 2.1.2. Availability
 - 2.1.3. Fault tolerance
 - 2.1.4. Interoperability
 - 2.1.5. Extensibility
 - 2.1.6. Maintainability
 - 2.1.7. Resource economy

- 2.2. Data access methods
 - 2.2.1. DataSource control
 - 2.2.2. Business objects
 - 2.2.3. Stored Procedures
 - 2.2.4. Dynamic SQL
 - 2.2.5. Web services
- 2.3. Location of business rules
 - 2.3.1. That is, database (code, reference tables, triggers, constraints, etc.), application, or presentation layer.
- 2.4. Integration
- 2.5. Session management
- 2.6. Configuration management
- 2.7. Deployment model
- 2.8. References
 - 2.8.1. Design and Implementation Guidelines for Web Clients

3. Interface design

- 3.1. Use of web form components
 - 3.1.1. FormView, DetailView, GridView, ReportViewer, etc.
 - 3.1.2. AJAX
- 3.2. Form navigation
- 3.3. Messages
- 3.4. Data validation
- 3.5. Error handling
- 3.6. Data formatting
- 3.7. Reporting
- 3.8. Section 508 Standard (<http://www.section508.gov/>)

4. Coding Standards

- 4.1. Naming conventions
- 4.2. Formatting code
- 4.3. Comments
- 4.4. Reuse
- 4.5. Table driven methods
- 4.6. Scope and lifetime
- 4.7. Documentation
 - 4.7.1. Metadata
 - 4.7.2. Class diagrams
- 4.8. Gotchas
 - 4.8.1. Magic numbers
 - 4.8.2. Implicit data type conversions
- 4.9. References
 - 4.9.1. Practical Standards for VB.Net
 - 4.9.2. “Design and Implementation Guidelines for Web Clients”
 - 4.9.3. Code Complete

5. Database Design Standards

- 5.1. Relational model
- 5.2. Third Normal Form
- 5.3. Data access methods
 - 5.3.1. Stored procedures
 - 5.3.2. Dynamic SQL
- 5.4. Data integrity
 - 5.4.1. Entity
 - 5.4.2. Domain
 - 5.4.2.1.1. Data types
 - 5.4.3. Relational
 - 5.4.4. Use of NULL
 - 5.4.5. Use of Identity data type
- 5.5. Object dependencies
- 5.6. Use of views
- 5.7. Naming conventions
- 5.8. References
 - 5.8.1. Handbook of Relational Database Design

6. Security

- 6.1. Authentication
- 6.2. Authorization
- 6.3. SQL injection
- 6.4. Monitoring
- 6.5. References
 - 6.5.1. Writing Secure Code



State of Louisiana

Department of Health and Hospitals
Division of Information Technology

Application Database Object Change Procedures

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Table of Contents

Table of Contents	2
Overview	3
Objective.....	3
Scope	3
Assumption	3
Database (DB) Environment Overview.....	3
Development Database Build Procedures	4
New Systems – Creation of development DB environment	4
Developer/Change Coordinator:	4
Database Administrator (DBA):.....	5
Building changes in development DB environment	5
Developer/Change coordinator:	5
Quality Assurance (QA) Database Installation Procedures.....	5
New Systems – Creation of QA DB environment.....	5
Developer/Change coordinator:	5
DBA:.....	5
Promotion of changes from development to QA DB environment.....	6
Developer/Change coordinator:	6
DBA:.....	6
Developer/Change coordinator:	6
Production Database Implementation Procedures.....	7
New Systems - Creation of production DB environment	7
Developer/Change coordinator:	7
DBA:.....	7
Promotion of changes from QA to production DB environment	7
Developer / Change Coordinator:.....	7
DBA:.....	8
Developer / Change Coordinator:.....	8
Production recovery / back out if necessary.....	8
DBA:.....	8
Developer / Change Coordinator:.....	8

*For changes of non-database objects such as application program code, refer to the application change control team.

Overview

Objective

Provide environments / processes to manage application databases changes for ensuring the integrity, security, availability, recoverability, reliability and performance of strategic relational database systems for DHH.

Scope

This procedure applies to structural changes of relational database Data Definition Language (DDL) objects below:

- Tables
- Indexes
- Views
- Constraints
- Stored procedures and packages
- Other database objects

For changes of non-database objects such as application program code, refer to the application change control team.

Assumption

These procedures assume the developer/change coordinator has prearranged availability of database software and hardware infrastructure needed for the project.

Database (DB) Environment Overview

Database object changes are managed via standard database environments below:

1. Development DB - An open environment for building changes *.

Developer activities for the development environment are -

- a. If appropriate before making changes, request DBAs refresh development DB from production
- b. Define (create, alter, delete, modify) database object changes in development
- c. Unit test changes in development
- d. Create SQL scripts that will be used by DBAs to promote development changes to QA
- e. Obtain quality assurance approval for promotion of changes to QA
- f. Request DBAs to promote database object changes to QA environment

Developer access to the development DB environment is –

- a. Via application – unlimited
- b. Authority to update (create, alter, delete) application database objects (tables, indexes, procedures, triggers ...) & data (select, insert, delete, update)

*For changes of non-database objects such as application program code, refer to the application change control team.

Application Database Object Change Procedures *

2. Quality Assurance (QA) DB – A managed environment which mirrors production.

Developer activities for the QA environment are -

- a. Coordinate regression and system integration testing
- b. Coordinate performance and stress/load testing
- c. Coordinate acceptance testing and user signoff
- d. Obtain quality assurance approval for promotion of changes to production
- e. Request DBAs to promote database object changes from QA to production environment

Developer access to the QA DB environment is –

- a. Via application – unlimited
- b. Authority to read (select) application database data

3. Production DB environment – Live environment serving the business

Developer coordinates validation of the application system upon implementation of changes in production

Developer access to the production DB environment is –

Via application - as authorized by business owner

Note: A Development DB environment is normally not hosted in-house for “commercial off the shelf” (COTS) application systems. This is because COTS changes are developed offsite and provided by the software vendor.

Development Database Build Procedures

New Systems – Creation of development DB environment

Developer/Change Coordinator:

When an approved project requires a new database, the developer/change coordinator shall submit a request to the DBA team to create the development database environment.

The request should contain all requirements for the new database, including:

- DBMS server software version & database modules needed
- Primary type of application processing for the database (*ex.* Transactional versus reporting ...)
- Estimated disk storage space (row length & estimated # rows for each table)
- Database user accounts and roles needed
- Contact information of development technical resource (phone, email ...)
- Any other new database environment requirements

*For changes of non-database objects such as application program code, refer to the application change control team.

Application Database Object Change Procedures *

Database Administrator (DBA):

The DBA shall process the request for the new development DB environment as follows:

- Review the database requirements provided for completeness
- Discuss any outstanding issues with the development technical resource
- Create the requested new development database environment. Depending on requirements and available system resources, the new environment may be either an existing or a newly-created development system.
- Provide the developer / change coordinator with database user and connection information for the new development database environment.

Building changes in development DB environment

Developer/ Change coordinator:

The developer/change coordinator shall build changes in the development DB environment as follows:

- If appropriate before making changes, request DBAs refresh development DB from production.
- Request ID's to be recreated once refreshed.
- Define (create, alter, delete, modify) database object changes in development
- Use the standard development source code repository to store all database object code and scripts to be used by DBAs for promotion of changes to other environments
- Unit test changes in development

Quality Assurance (QA) Database Installation Procedures

New Systems – Creation of QA DB environment

Developer/ Change coordinator:

For new systems, the developer / change coordinator shall submit a request to the DBA team for creation of a QA database system. At least two week's notice is recommended prior to the first planned promotion from development to QA environment. The developer normally submits the request to create the QA environment at the same time that requirements are provided for the new development database system.

DBA:

The DBA shall create the requested new QA database environment based on the requirements received. Depending on requirements and available system

*For changes of non-database objects such as application program code, refer to the application change control team.

Application Database Object Change Procedures *

resources, the new QA database environment may be provided in either in an existing or newly-created QA database system.

Promotion of changes from development to QA DB environment

Developer/Change coordinator:

The developer/change coordinator does the following to have database object changes promoted to the QA DB:

- Obtain application quality assurance approval for promotion of database object changes from development to QA DB
- Request DBAs promote database object changes from development to QA DB

The request shall include all information needed to promote the changes including:

- A brief description of what the changes do
- Names and location of all modified/new database object code and scripts to be used for promotion of changes
- Instructions for successful promotion of changes
- Recovery / back out plan in the event of failure
- Requested date and time for the promotion of changes
- Name and contact information of person to contact of person to notify when change is promoted to QA DB

Note: The developer/change coordinator shall arrange promotion of related non-database objects such as application program code with the application change control team.

DBA:

The DBA shall process the request to promote database object changes from development to QA DB as follows:

- Review the information provided by the developer/ change coordinator for completeness
- Discuss any outstanding issues with the development technical resource
- Use the standard QA source code repository to store all database object code and scripts provided by the developer/change coordinator and used by DBAs for promotion of changes to the QA DB
- Follow the instructions provided by the developer and promote the database objects to the QA DB
- Verify the logs created during the move to QA DB
- Notify the developer / change coordinator of success or failure of the move

Developer/Change coordinator:

*For changes of non-database objects such as application program code, refer to the application change control team.

Application Database Object Change Procedures *

The developer/change coordinator does the following to verify changes in the QA environment:

- Coordinate regression and system integration testing
- Coordinate performance and stress/load testing
- Coordinate acceptance testing and user signoff
- Obtain application quality assurance approval to request DBA promotion of database object changes to production

Production Database Implementation Procedures

New Systems - Creation of production DB environment

Developer/Change coordinator:

For new systems, the developer shall submit a request to the DBA team to create the production database environment. At least a two week notice is recommended prior to the first planned promotion from QA to production. The developer normally submits the request to create the production environment at the same time that requirements are provided for the new QA system.

DBA:

The DBA shall create the requested new production database environment based on the requirements received. Depending on requirements and available system resources, the new production database environment may be provided in either in an existing or newly-created production database system.

Promotion of changes from QA to production DB environment

Developer / Change Coordinator:

The developer/change coordinator does the following to have database object changes promoted to the production DB:

- Obtain application quality assurance approval for promotion of database object changes from development to QA DB
- Request DBAs promote database object changes from QA to production DB

The request shall include all information needed to promote the changes including:

- A brief description of what the changes do
- Names and location of all modified/new database object code and scripts to be used for promotion of changes
- Instructions for successful promotion of changes

*For changes of non-database objects such as application program code, refer to the application change control team.

Application Database Object Change Procedures *

- Verification of successful testing, user signoff and application quality assurance approval for promotion of changes to production
- Recovery / back out plan in the event of failure
- Requested date and time for the promotion of changes, including verification that user is in agreement with planned outage if promotion is requested during business hours
- Name & contact information of person to notify when change is promoted to production

Note: The developer/change coordinator shall arrange promotion of related non-database objects such as application program code with the application change control team.

DBA:

The DBA shall process the request to promote database object changes from QA to production DB as follows:

- Follow the instructions provided by the developer and promote the database objects to the production DB
- Verify the database logs created during the move to production
- Notify the developer / change coordinator of success or failure of the move

Developer / Change Coordinator:

The developer / change coordinator shall verify the application upon promotion to production and notify the DBA of success or need for recovery according to pre-arranged back out plan.

Production recovery / back out if necessary

DBA:

Upon notification that changes are not successful, the DBA shall recover the production database according to the back out plan, then inform the developer / change coordinator.

Developer / Change Coordinator:

Note: For recovery / blackout of changes to non-database objects such as application program code, refer to the application change control team.

Upon recover / back out of the production database & non-database objects, the developer / change coordinator shall verify the application and notify the DBA & application change control team of results.

*For changes of non-database objects such as application program code, refer to the application change control team.

Applications Database Object Change Process Overview



Applications Database Object Change Process

Environment Overview

OBJECTIVE: Provide environment and processes to manage changes and ensure the *integrity, security, availability, recoverability, reliability and performance* of strategic database systems for DHH

SCOPE: Structural changes of *relational database objects* (tables, indexes, views, constraints, stored procedures, stored packages and other database objects) .

Note: *For changes to non-database objects such as application program code, refer to app change control team.*

DEVELOPMENT DATABASE

Open Environment
for Building Changes

- Allows developer to define & modify (create, alter, delete) application database objects
- Provides flexibility in developing solutions
- Does not impact production
- Allows more efficient unit testing using subset of data

(Quality Assurance) QA DATABASE

Managed Environment which
Mirrors Production

- Simulates production environment (release level, size, scope & infrastructure) allowing staging of changes prior to go-live
- Provides controlled setting for system integration testing & signoff of changes prior to deploying to a live, run-time environment
- Allows for production problem replication & troubleshooting

PRODUCTION DATABASE

Live Environment Serving
Business

- Allows for stable, secure, reliable environment based on managed changes to ensure integrity, recoverability & performance of production data base systems

Applications Database Object Change Process

Procedures Overview

DEVELOPMENT DATABASE

Open Environment
for Building Changes

- New system:
 - Developer determines database requirement specifications
 - DBA creates new database shell per specifications from developer
- Existing systems:
 - If requested by developer for more effective build, DBA refreshes Development DB objects from Production
- Developer:
 - Creates & modifies database objects (tables, indexes, stored procedures...)
 - Unit tests application
 - Provides SQL scripts to for promoting DB objects

Developer ACCESS

- Via Application – Unlimited
- Authority to update (create, alter, delete) application database objects (tables, indexes, procedures, triggers ..) & data (select, insert, delete, update)

(Quality Assurance) QA DATABASE

Managed Environment which
Mirrors Production

- DBA facilitates the promotion of database objects to QA/STG with use of scripts provided by developer
- Developer coordinates testing (ex)
 - Regression testing
 - System integration
 - Performance testing
 - Stress/load
 - User acceptance testing
- Developer
 - Obtains user signoff
 - Provides production implementation & recovery plan
 - Requests that DBA promote database object changes to Production

Developer ACCESS

- Via Application -- Unlimited
- Read access (select) to application database objects & data

PRODUCTION DATABASE

Live Environment Serving
Business

- DBA facilitates the promotion of database objects to Production with use of scripts provided by developer.
- Developer:
 - Coordinates all verification for the application
 - Notifies DBA of verification or need to back out changes
- In the case of non-verification
 - DBA backs out changes upon request
 - Developer coordinates verification of application upon back out & notifies DBA

Developer ACCESS

- Via Application -- As authorized by business owner

Information Strategy (I)

Attachment VII

How IT Will Implement...



